Chapter 1

RESPONSE 98 Overview

TIMELINE

RESPONSE 98 was a Federal Emergency Management Agency (FEMA) Headquarters-sponsored exercise held during the week of April 20-24, 1998. Player orientation was conducted on April 20, followed by three and a half days of exercise play on April 20-23. A "Hot Wash" evaluation session was conducted on Friday, April 24. The planned time schedule is depicted in Figure 1-1.

EXERCISE RESPONSE 98 – ACTUAL DATES

Exercise Day 1	Exercise Day 2	Exercise Day 3	Exercise Day 4	Exercise Day 5
APR 20	APR 21	APR 22	APR 23	APR 24

SEPTEMBER 1998 – SIMULATED DATES

Monday	Tuesday	Wednesday	Thursday	Friday
7 *Labor Day* 0830-1200 Player Orientation 1200 - 1700 Exercise Play	8 0830 - 1700 Exercise Play	9 0830 - 1700 Exercise Play	10 0830 - 1700 Exercise Play	11 0800 - 1000 Hot Wash

Figure 1-1. *Exercise Timeline.*

PURPOSE

RESPONSE 98 was designed to assess and evaluate Federal, State, and local plans, policies, procedures, systems, and facilities for responding to a disaster event that impacts several States and Provinces, as well as two FEMA Regions. The Exercise provided a basis on which to evaluate the procedures that support the *Federal Response Plan* (FRP) and Regional supplements to the FRP and the integration of those procedures with emergency operational plans developed by the States located in FEMA Regions I and II.

SCENARIO

The RESPONSE 98 scenario depicted a major hurricane named Janet that developed in the Atlantic Ocean and posed a significant threat to the northeast United States and the Canadian Atlantic Provinces. Figure 1-2 shows Janet's storm track and the levels of intensity.

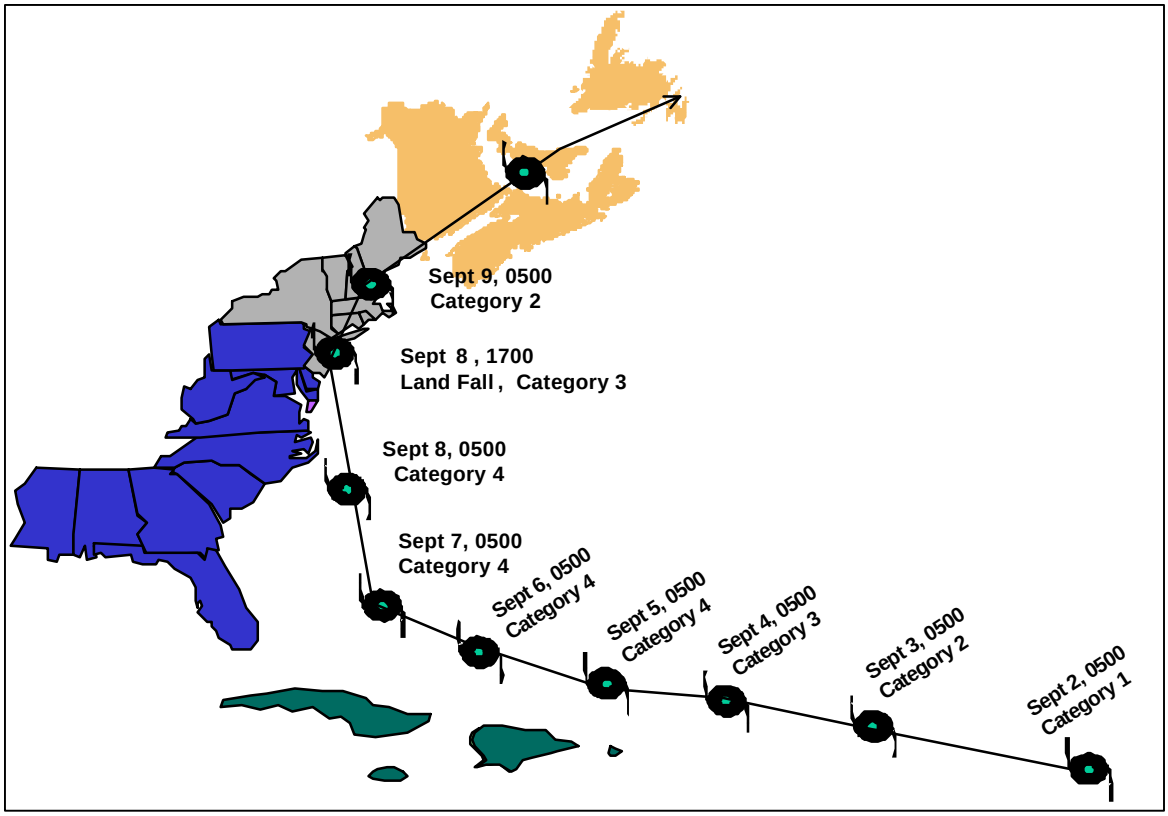

Figure 1-2. *Exercise Storm Track.*

PARTICIPANTS

RESPONSE 98 exercise activity occurred at the locations shown in Figure 1-3. Participation included representatives from eight States and their local communities, four Canadian Provinces, and numerous Federal departments and agencies at national and regional levels which form the Emergency Support Functions under the FRP. In FEMA Regions I and II, the Regional Operations Centers (ROCs) were activated for the exercise as were Advanced Elements of Emergency Response Teams (ERT-As) and the Mobile Air Transportable Telecommunications/Mobile Emergency Response System units. FEMA Headquarters convened the Emergency Support Team (EST) to coordinate this multi-jurisdictional exercise.

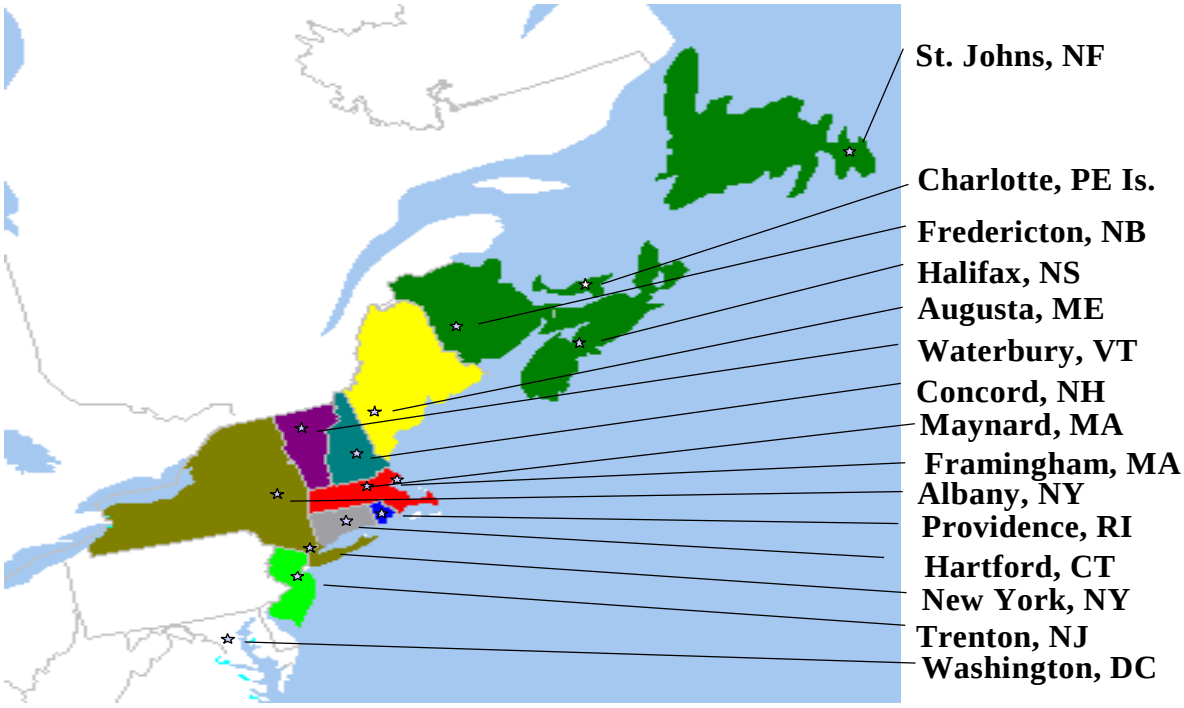

Figure 1-3. *Principal Exercise Locations.*

OBJECTIVES

RESPONSE 98 Exercise Objectives were developed jointly with participating organizations at the Federal national and regional levels, in States and Provinces, and at local levels. Table 1-1 lists the functional areas examined during the exercise from the State and local, coordination, and Federal perspective. Evaluation elements associated with the objectives focused on the specific aspects of each objective that needed to be evaluated. The evaluation methodology provided a general and widely accepted framework for organizing objectives and assessing them.

State and Local Perspective	
Assess the capability to coordinate and conduct:	**S1.** Alert and Notification **S2.** Communications **S3.** Coordination and Control **S4.** Emergency Public Information **S5.** Damage Assessment **S6.** Health and Medical **S7.** Evacuation and Sheltering **S8.** Public Safety **S9.** Public Works **S10.** Resource Management **S11.** Warning
Coordination Perspective	
Assess the coordination relationships and interoperability among all levels of government to conduct:	**C1.** Alert and Notification **C2.** Activation, Staging and Mobilization/Deployment of Federal Resources **C3.** Coordination **C4.** Public Information, Media Relations, Congressional Liaison, and other Public Outreach Functions **C5.** Donations **C6.** Mitigation **C7.** Training **C8.** Financial Management **C9.** Emergency Response using new Plans and Procedures
Federal Perspective	
Assess the capability to provide resources and support using the *Federal Response Plan* and its regional supplements.	**ESF1.** Transportation **ESF2.** Communications **ESF3.** Public Works and Engineering **ESF4.** Firefighting **ESF5.** Information and Planning **ESF6.** Mass Care **ESF7.** Resource Support **ESF8.** Health and Medical Services **ESF9.** Urban Search and Rescue **ESF10.** Hazardous Materials **ESF11.** Food **ESF12.** Energy

Table 1-1. *Index of Categories and Functional Areas for Exercise Objectives.*

EVALUATION METHODOLOGY

RESPONSE 98 was evaluated at all exercise locations through the use of on-site evaluators. The participating States conducted their own evaluations of the State and Local objectives at the State locations. The primary agency for each ESF evaluated its respective ESF objectives in Washington, D.C., and in the two participating Regions. FEMA evaluated the coordination perspective objectives at all locations.

Exercise play in RESPONSE 98 was designed to assess and evaluate specific aspects of response to the catastrophic hurricane scenario depicted in this exercise. In designing the exercise, response organizations identified the actions needed in the exercise to accomplish evaluation objectives. The storm track and supporting scenario were built to trigger most of these actions in exercise play. The remainder was triggered by Master Scenarios Events List (MSEL) items created for this purpose.

For each of the expected actions, evaluators identified "points-of-review" questions for evaluators to answer about what happened during exercise play. Evaluators were provided standardized forms on which to record observations. During exercise play, evaluators recorded information about actual play and the ways in which it differed from what was expected, as well as answered points-of-review questions to collect data needed for post-exercise analysis. Additionally, all exercise participants had an opportunity for individual input to the evaluation by completing the observation/comment forms and survey forms, and via formal critique comments. All major agencies used this methodology to evaluate their objective areas and to provide input to this *Exercise Evaluation Report* (EER).

Following the exercise, the Evaluation Team Chiefs from each major location were tasked with developing an initial EER from the data collected by the evaluators. This information was then collected at FEMA Headquarters (HQ) for consolidation into the final EER report.

An Exercise Evaluation Group (EEG), Figure 1-4, was established for evaluation planning and management. The Chief Evaluation Officer was Ms. Vanessa E. Quinn, of the Evaluation and Corrective Actions Branch of FEMA's Exercise Division. Evaluators were assigned at each major exercise location; all three evaluation perspectives were represented. One of the evaluators at each site was designated as the Evaluation Team Chief.

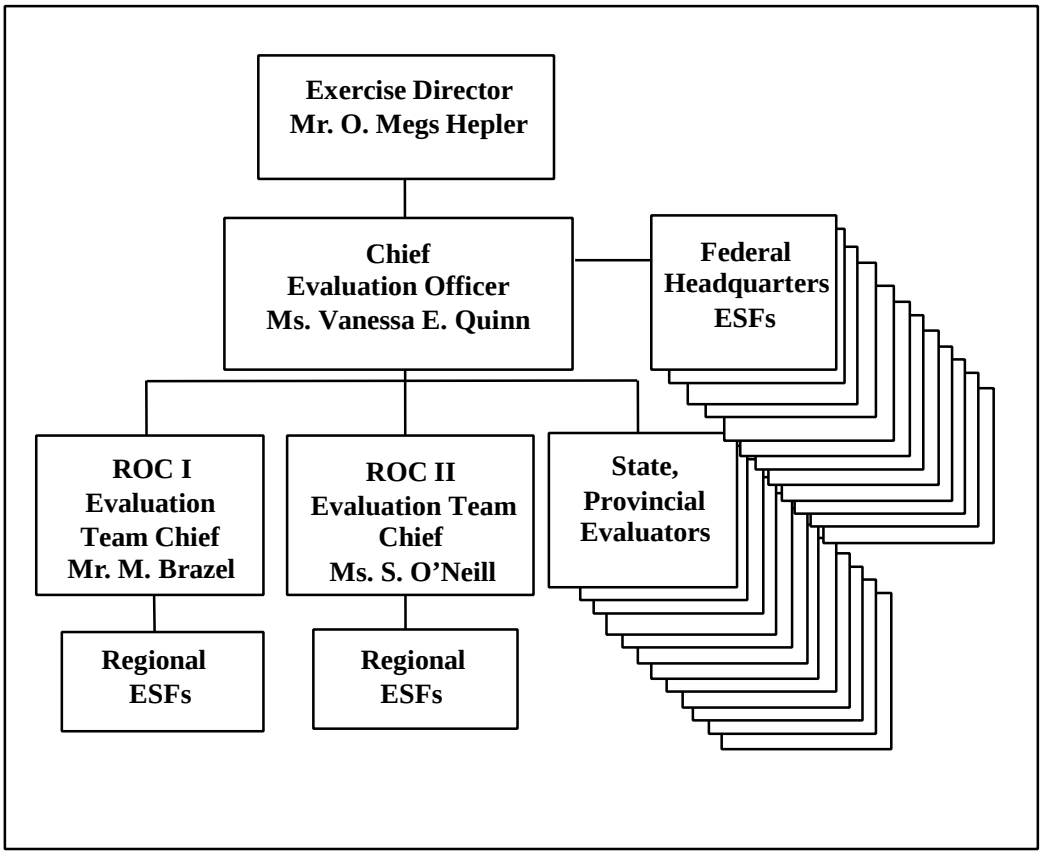

Figure 1-4. *Exercise Evaluation Group.*

OVERALL EXERCISE MANAGEMENT AND DOCUMENTATION

For details about the overall management of the RESPONSE 98 exercise, its control and simulation, and the planning and design efforts, please refer to appropriate documents described below:

- *Concept and Objectives.* Established the initial parameters for the conduct of the exercise, including the focus of the evaluation efforts.

- *Exercise Plan.* This document identified the scope and concept of play for all players; identified key exercise assumptions, artificialities, and simulations; established the scenario narrative consisting of weather and other background information leading to the start of the exercise; and provided exercise objectives and evaluation elements. The *Exercise Plan* also explained procedural aspects of exercise play, the role of controllers and evaluators, and the administrative

and support requirements and procedures governing play of the exercise. The *Exercise Plan* incorporates the Concept and Objectives Paper.

- *Evaluation Plan.* This document expanded on the methodology contained in the *Exercise Plan*, giving more detailed instructions to the evaluators on their responsibilities before, during, and after the exercise.

- *Master Scenario Events List* with Implementers. This document was used by controllers to manage the exercise. It ensured controllers knew when events were expected to occur and when to insert event implementer messages into the exercise. Implementer messages were designed to prompt exercise play required to achieve exercise objectives.

- *Control Staff Instructions.* This document provided controllers and simulators with guidance concerning procedures and responsibilities for exercise control, simulation, and support. It explained the exercise concept as it related to controllers and simulators; established the basis for control and simulation of the exercise; and established and defined the communications, logistics, and administrative structure needed to support control and simulation during the exercise.

- *Player's Handbook.* This document provided players with exercise-specific information and procedures they would need to participate in the exercise.

- *Communications Directory.* This contained telephone numbers of key exercise players and locations.

SUMMARY OF FINDINGS

Exercise RESPONSE 98 included the largest mix of FEMA's customer base of any exercise attempted to date. In addition to Federal, State and local government personnel, volunteer organizations from the Salvation Army to local fire departments and private industry, including Wall Street bankers and local and regional telephone companies, were actively engaged. The partnerships that were developed through the planning process and fostered during the conduct of the exercise will pay dividends for years to come in improved emergency management.

While featuring a catastrophic hurricane hitting the northeast coast, the exercise was designed to meet the multiple objectives of each participant group and provide a valid test of their combined capabilities. Its applicability is valid for any natural disaster.

In addition, the planning and preparation for the exercise yielded its own dividends. When the winter ice storms of 1998 struck the northeastern United States and Canada, States and regions were able to use the plans, contacts, and procedures that had been created in preparation for RESPONSE 98. According to State emergency management officials, "this was a decisive factor in the speed and success of their response to the ice storm crisis."

State and Local Perspective

In addition to the benefits gleaned during the winter ice storms, States and local communities were able to exercise their emergency management procedures, test vital routine and emergency communications procedures, and perform numerous tests of recently modified procedures for dealing with a catastrophic event. The opportunity to interrelate with the various department, agency and volunteer groups that are standing by to support relief and requests for assistance validated, and in some cases identified, improved procedures within the various jurisdictions. One State was able to identify an equipment incompatibility with that being used by the National Weather Service. Corrective measures will have a profound effect on the alert and warning effectiveness of that State. The actual deployment of an Urban Search and Rescue (US&R) Team to Manchester, New Hampshire, increased realism and afforded an opportunity that benefited both the US&R Team and community rescue teams. Conversely, the exercise highlighted the overwhelming demand for US&R assets in a very large-scale disaster.

The exercise demonstrated that plans should to be developed for the following:

- State-to-State mutual aid agreements need to be developed for all States to provide a mechanism to use other State's assets.

- Both mechanisms and procedures are needed to make use of foreign US&R assets.

- For both the State-to-State and international US&R assistance, funding issues need to be resolved to minimize delays in acquiring other assets when needed.

- Donations Management procedures for a catastrophic disaster need additional work.

Coordination Perspective

States' capabilities vary widely in the use of Geographical Information System (GIS) capabilities. Some States are on the leading edge of GIS analysis and are self-sufficient. FEMA's Mitigation Directorate has distributed a software product named *MapInfo* to each State. Unfortunately, not all State mitigation planners are part of the exercise or disaster response teams, and some States do not have access to any GIS support.

Despite the planning and advanced training, few States or regions were able to fully utilize the GIS reports that were distributed by FEMA. In some cases, there were equipment failures. In others, several days passed before State and regional personnel were able to familiarize themselves with the GIS software in order to customize data for their specific needs. In other cases, the information was not distributed to the State organizations that understood and normally make use of the data. GIS model predictions can be critical in determining evacuation routes and in other pre-event planning for disasters such as hurricanes.

Specifically, the key points are:

- GIS modeling will become more important to the emergency management community as models improve. GIS seems to be used primarily by mitigation organizations. Response and recovery organizations must also be trained on its benefits and use.

- FEMA's GIS models need to be revalidated. If accurate, they should have wider distribution, and if inaccurate, they must be replaced.

The Department of Transportation used Exercise RESPONSE 98 as an opportunity to test events and procedures for strengthening Movement Coordination Center operations. Significant results included:

- Provided inputs to complete Concept of Operations Plan.

- Allowed testing of the database under operational conditions.

- Tested and developed instructions for using an Internet-based information system.

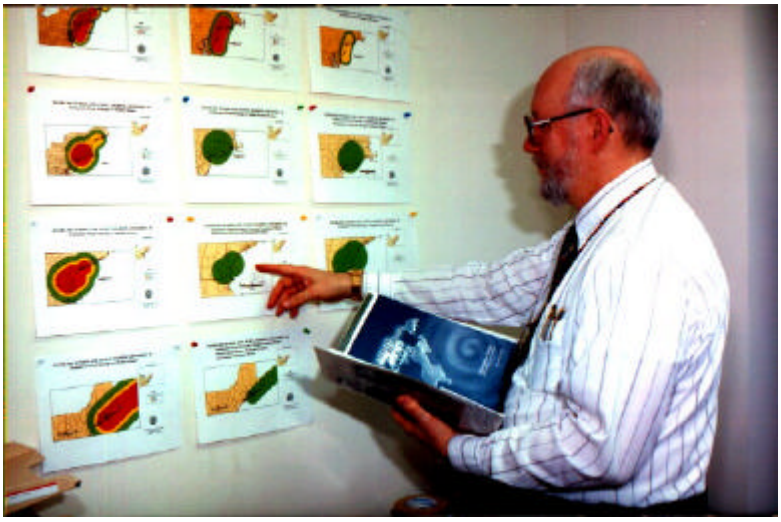

Figure 1-5. *Geographical Information Systems (GIS) Data.*

Federal Perspective

Although all ESFs interacted well and satisfied the needs of the States, documented standard operating procedures and checklists would have enhanced their ability and streamlined many activities in the regions.

The initial EST play was limited to a low-level response cell. The demands of the exercise, including intense play with two Regions and their respective States, required escalation of EST involvement. The full EST was not brought into the exercise until the third day of play. This created confusion in the EST as to their role, and may have confused the Regions as to what transpired. Because of the limited initial commitment by Headquarters staff for the exercise, the EST did not take full advantage of a significant learning opportunity for catastrophic disaster planning. Future exercises should be used as an opportunity to examine and develop areas that are known to present problems. For example, the idea for creating a Housing Task Force as a way to adjudicate extraordinary housing requirements in a large disaster, especially across multiple regions, appears to be a good concept that should be developed further.

The Regions expected the EST to set up the Mobilization Centers in this exercise, and the EST assumed that the Regions were setting up the centers. Procedures for selecting a location for, setting up, and staffing the Mobilization Centers need to be developed and standardized. The EST noted that the exercise clearly required activation of resource allocation and adjudication mechanisms among the ROCs, the ERTs, and the EST, that could be appealed to the Catastrophic Disaster Response Group.

The exercise demonstrated the potential value of the Emergency Management Assistance Compacts, as well as highlighted how limited FEMA's resources are in the field. If another major disaster had occurred during this period, most of the regional resources would have already been committed, and perhaps have been unable to staff for another major disaster.

Chapters 2 through 4 of this report provide details about specific objectives and activity during the exercise.